MEDICAL AND SURGICAL REPORTER

No. 1761. PHILADELPHIA, NOVEMBER 29, 1890. VOL. LXIII.—No. 22.

CLINICAL LECTURE.

THE TREATMENT OF PULMONARY CONSUMPTION.

BY WILLIAM PEPPER, M. D.,

PROFESSOR OF THE THEORY AND PRACTICE OF MEDICINE, UNIVERSITY OF PENNSYLVANIA.

Gentlemen: We discussed, at our last meeting, the question of change of climate for patients suffering with pulmonary consumption. You remember that we decided that we must be governed in the matter by the place from which the patient comes; the state of his finances, his sex and age, the stage of the disease and the places to which he or she is to be sent. This latter consideration, we remember, varies with the condition of the patient. We studied the character of life to be followed at these places of resort and the care which was to be insisted upon. I believe that the only time in the course of the disease when a change of climate is inadmissible is in the last stages of the disease. Even then we see most remarkable results in cases in which we are led, from a careful study of the condition, to expect but little. There is one consideration which we must not overlook in advising a change in a patient late in the disease. Ill-natured persons may say that we have kept the patient home until we have squeezed all the money we can from him, and then when the failure to produce a cure is palpable we send him away, to die far from home and friends. Hence in discussing this matter with a patient well along in consumption, explain the position; it is not your duty to deny the chance of improvement which exists; if the patient elects to take the chance, unless far advanced, allow him to go. Once started he should follow out every detail of hygienic care as fully as if at home.

If the patient decides to fight the disease out at home, do not neglect the slightest feature of the case; inquire into and regulate every circumstance and condition of the patient's life. No point is so small that you can afford to neglect it. First, in ordering more rest for the patient, determine if he is actually obliged to work for his living; many cases that cannot afford to go away, can lay off from work. If he need not work, have him take his breakfast in bed; not allowing him to expose himself to the cold air of a house in the early morning, when his own powers of resistance are lessened. Then he need not go down stairs until the house has been nicely warmed. He should dress leisurely, and should take as much out-door exercise as his strength permits and the weather allows; but do not allow him to become fatigued or depressed. He should lie down and rest both before and after his dinner, going out again after that meal. Do not simply tell your patient to live out-of-doors; then he is apt to overexert himself by staying out too much. He should rest and sleep, if possible, in the middle of the day. Promote the circulation and increase the tone of the muscular system by aiding and correcting digestion. Order food that will increase the resisting power of the body; so that he will cease to be so much affected by changes in the weather. He should retire early and sleep in a room which has not been used for a sitting room; the air must be pure. If it is pure in the bedroom the window had better be kept nearly, if not wholly, closed. The cold night air of a sleeping room may cause considerable irritation. Allow the patient to undress quickly, using candle light. Dress him carefully, in good pure woolens. The skin should be kept in good condition by baths and friction. A rapid sponge bath in salt water, followed by brisk rubbing, may be used; if this is too severe, rubbing oil over the body and removing it once a week, may prove beneficial. Make these

details the principal "business" of the patient's life.

Pulmonary gymnastics, in bringing in play the remaining healthy tissue and strengthening pulmonary muscles, is an excellent exercise. These must be advised whether the patient is at home or abroad. At all stages the digestion must be most carefully watched; hence make the rule never to give any drug which lessens the appetite or weakens the digestive powers. Such a drug does more harm than it can possibly do corresponding good.

There are so many signs and symptoms in pulmonary consumption that to attempt to prescribe for each one would soon develop polypharmacy. Try to grasp the most prominent and most urgent symptoms and attack them. There are from twelve to fifteen symptoms in this disease: cough, coated tongue, the pulse, the temperature, night-sweats, sleep, the condition of bowels, loss of flesh, pain in the chest, etc. Remember that no one remedy is in the slightest degree a specific. Since the discovery of the bacillus tuberculosis and its close relation to this disease, there has been no discovery of a mode of treatment which is more efficient in its results than was possessed before. We cannot destroy or even weaken the vitality or virulence of the bacillus, except by increasing the resisting power of the patient, producing more healthy cellular action, restricting the seat of the disease and restoring tone.

In considering the use of antiseptics or parasiticides, we know that if we could catch the bacillus and dose him well with bichloride or arsenic, we might do him extensive harm; but situated in the lungs of an ordinary patient, he can well defy us to attempt to drive him from that position. Inhalations do not go deep enough nor are they concentrated enough to effect much change. Experiments are being constantly made with this or that agent which kills or injures the bacillus, in the attenuated vapor to which it becomes reduced before it reaches his locality, with impunity of further effect upon the patient; but as yet we have no such drug on which we can rely.

Remembering that unfortunately there exists no specific curative remedy, we naturally seek for further means of prevention of the spread of this dread disease. I will only speak of two points in this connection. One is the importance of destroying the sputa, or at least its infectious properties, immediately on its expectoration. Have the material received in some vessel which contains a powerful parasiticide; or have it burned or buried at once. The second question is one which fascinates the medical profession; it is the endeavor to utilize our knowledge of the bacillus to render the system less susceptible to its deposition. Possibly this is to be accomplished by inoculation with attenuated tuberculous virus; on the principle that this would produce the same result that the virus of vaccine disease does in relation to small-pox. It is going to be a serious business if the future parent is to have his child inoculated with the virus of all infectious diseases, to preserve him from the course of diseases to which our present children are exposed. But if it is proved that each disease has its preventive inoculation, similar to small-pox, this may become a question which the parent of the future may be called upon to decide. At present we have no direct evidence that attenuated tuberculous virus will make the human species less susceptible; nor do I have much hope of such a possibility. Small-pox and phthisis are such different diseases that analogy between them is not striking; still many observers throughout the medical world are working over this point, on the lower animals, and we shall probably hear their conclusions in the future.

Undoubtedly there is a preparation of the system before the successful deposition of the bacillus takes place. Depressing influences have been at work; possibly some local catarrhal affection exists in the lung. The disease attacks only those who are not at the best state of resistance, while small-pox on the other hand attacks the strong and weak alike, another point of difference in analogy. Prevent this susceptible condition by increasing the vigor and resisting power, first by hygiene, secondly by attention to the digestion and assimilation. Often the remedies or treatment for atonic or irritative dyspepsia may be indicated. Keep this thought uppermost; that the digestion must be kept in the best possible state; if you do not injure it by the use of additional nutrients, try such things as fat, in cod-liver oil, plain or emulsified; but the oil will do no good unless it is well borne. At least as much food must be taken during its continuance as before its commencement. The amount must be decided by the patient; a teaspoonful that is pleasant is better than two teaspoonfuls that nauseate. But if a

tablespoonful can be well borne at a dose so much the better. If other preparations prove offensive, try the oil in combination with an alkaline salt, as the hypophosphites or lactophosphate of calcium; this introduces an element of nutrition which also favors the liquifaction of expectoration. Again cod-liver oil with wild-cherry bark suits many delicate or fastidious stomachs; here is a tonic and soothing expectorant at the one time. The markets are filled with preparations of this oil in combination with almost every known substance. Many of them are honest. I prefer those with lime as expectorants; with a tonic or with some digestive agent.

Iron is indicated in many cases, but frequently its use is attended with disappointment. If it serves to lessen the food-taking powers of the patient stop it at once. Often where cod-liver oil is badly borne iron is of service and *vice versa*, cod-liver oil may replace iron nicely.

Always make a study of the temperature in every case. It often happens that it must be checked. The best means of doing this vary; it depends on the condition which is making the temperature high. If there is active irritation around the seat of disease, not merely the infective poison of the system, but an acute catarrhal inflammation with exacerbations of temperature, this is best treated as an attack of catarrhal pneumonia. Rest in bed, counter-irritation, mild sedatives and antipyretics should be strictly adhered to until the temperature comes down. Antipyretics should never be given and the patient still allowed to go about; it is not philosophy or common sense. If the temperature is kept down with these drugs and the patient goes about, he is still more exposed to the causes which have produced the rise of temperature. If the inflammation cannot be removed, but there are occasional exacerbations when the patient is acutely sick, restrict the diet and apply dry cups over the seat of the morbid process. Where the fever is continuous, with no acute exacerbations, but still is rather high, antipyretics may be included cautiously in the regular treatment. Quinine can be used, provided it does good in moderate doses; that is, distinctly checks the temperature, when four, six or even eight grains a day are given. Under these circumstances there is no harm in continuing it for weeks at a time. Very small doses of antipyrin with quinine often produce marked benefit. Sufficient of this drug should not be given to produce a lowering of temperature within an hour or so, for although we know the power of these newer drugs to produce a lowering of temperature and nothing else, still under the use of antipyrin, I have always found the patient a little relaxed and a little more liable to catch cold than he was before. Hence only endeavor to check temperature slightly with such drugs; three grains of antipyrin with two of quinine twice a day are often excellent. Remember that inflammation is producing the fever, and that in keeping the surface temperature down too much, you may be injuring the condition of the patient. Relieve the temperature by hygiene, by diet, by exercise and by fresh air. Aconite given late in the day may be excellent; a single drop every hour for from five to eight hours, while producing no depression or relaxation, may be of inestimable service. Cool water externally, with its effects carefully studied, may be tried. A cool bath daily, and followed by friction is useful in some cases.

The cough nearly always requires attention. Usually it is poor judgment to attempt to stop it while the disease lasts; and after spots of broken-down tissue appear in the lung it is far better that it should not be checked. When, however, it is evident that there is a needless amount of effort expended by the patient; when he is racked by excessive paroxysms, then it should be controlled. The use of inhalations for this purpose is far better than the use of drugs by the stomach; for it is necessary to blunt the nerves of respiration, and the drug which does this, also affects the sensibility of the digestive tract; hence it is apt to impair the appetite. Use a sedative, antiseptic, alterative inhalation, which, while not strong enough to disinfect the lungs, fills the bronchial tubes with purified, disinfecting air. This does good while it relieves the troublesome symptom. Creasote, turpentine, terebene—a more volatile derivative of turpentine—preparations of iodine, chloroform, ether, conium, are all local sedatives capable of producing the proper results. The forms of apparatus for inhalation are legion. I prefer a simple jar, with ample cork; through the cork insert two tubes, have the material to be used placed in the jar and allow the patient to draw air through the shorter tube. This apparatus can be made into a portable form by using short bent tubes, corked at each end, in which is placed sufficient of the preparation for one dose. A

number of these tubes can be carried in the pocket; when the patient feels that a spell of coughing is coming on, he can open a tube and inhale its contents. A fair prescription for this purpose is the following:

℞ Creasoti . . . . . f℥ i
Tr. iodi . . . . . f℥ iii
Chloroformi . . . . . f℥ ii
Alcoholis . . . . . q. s. ad. f℥ i
Sig. Inhale ten drops.

Carbolic acid can be substituted for the creasote in somewhat smaller doses. Thymol, a highly volatile antiseptic, agreeable in odor, can be tried; tincture of conium can replace the chloroform; these are merely suggestions for your own improving. Ammonia developed by the action of a weak acid on the carbonate of ammonia makes a useful form of inhalation; to this you can add any volatile substance you think indicated. If there is excess of secretion, you can employ some astringent, such as zinc. In time, as your practice grows, you can call in, if you think advisable, the use of compressed air to drive these inhalations farther into the lung substance.

Occasionally, for a variety of reasons, you feel called upon to prescribe a cough mixture; the inhalations may be of no service, or inconvenient, or inaccessible to the patient's use. Then remember the cardinal rule of prescribing, that nothing shall be given that impairs the appetite. Use the simplest expectorants in the smallest possible doses. Given in syrup form, the expectorants are apt to be somewhat nauseating. I prefer some such pill as the following, which relieves cardiac excitement in case of fever, is rather expectorant, and allays irritation.

℞ Ext. opii . . . . . gr. iii–v
Pulv. digitalis . . . . . gr. xv–xxx
Pulv. scillæ. . . . . gr. xv–xxx
Quiniæ sulph. . . . . gr. xxx
Div. in pil. No. xxx. Sig.: one, two to four times a day.

If the squills nauseates, it can be subsequently left out. In place of the opium if it is found to be too constipating codeia can be given. Ammonium carbonate or muriate in simple brown mixture is excellent when the expectoration is thick and scanty. It makes an agreeable sedative and laxative.

Some cases admit of the application of remedies direct to the diseased spot. When the process is limited to one apex, remaining obstinately there: neither spreading nor shrinking and the patient is in good general health, it is admissible to insert into this circumscribed area by means of the hypodermic needle certain remedies. Creasote, thymol, iodine in small amounts at regular periods may relieve the symptoms most markedly. It is not a radical measure; there are no complications; expectoration is allayed. Irritation apparently subdued and general good results follow. Unfortunately the cases are rare which admit of this treatment; the process must be sharply circumscribed, easy of access and the injections must be rather weak and frequently repeated.

In a certain group of cases, creasote is well borne by the mucous membrane of the stomach; here it can be used for its constitutional effect; combined with the oil of eucalyptus in capsules it is often excellent. Constitutional treatment which will favor the appetite, be antiseptic and help to render the lung a less favorable nidus for the bacillus, can all be added in one prescription, such as the following, which is not unpleasant to take.

℞ Creasote . . . . . 32 drops
Comp. tincture of gentian . . . . 1 fl. ounce
Comp. tincture of nux vomica . . 2 fl. drachms
Whiskey or brandy . . . . . 2 fl. ounces
Glycerine . . . . . 1 fl. ounce
Sherry wine . . . . . 1 pint
M. S. Dose: a dessertspoonful to two tablespoonfuls.

This lecture I have intended rather as a hasty glance at a great subject than a careful discussion, complete in its details.

COMMUNICATIONS.

HYDROPHOBIA.

BY HIRAM CORSON, M. D.,
CONSHOHOCKEN, PA.

Hydrophobia is a disease which has attracted much attention, and is at present one about which opposite opinions are held. Some persons deny that it ever exists in the human system, while others, as M. Pasteur and his followers, believe that human beings are as readily and fatally affected when bitten by a rabid dog, as another dog would be if bitten. Not only so, but that, by inserting a portion of the brain or spinal marrow, taken from a rabid dog, into the body of a human being—as is done in inoculating with small-pox virus—persons may be protected from rabies. Such protection is offered to all at

the "Pasteur Institute" in Paris; and now, persons if bitten by a dog supposed to be mad, resort to this means of safety. In New York, too, such an Institute has been gotten up, and persons who chance to be bitten, even by a healthy dog, flock to the "Gibier Institute" for protection; for the opinion has been advanced, by those "cultivating" the virus and the fears of the public, that rabies may accrue from the bite of a dog not rabid, and that "even a rabid dog may communicate it to others and afterwards return to his normal state of health." And yet more, Dr. Gibier says: "I have experimentally demonstrated that birds, and notably hens, which contract rabies, may communicate it to mammifera, to which it will prove fatal, though the hens may spontaneously recover." Strange talk this by a man who writes: "I know of no authentic case of rabies that has been cured in man." The hen, though, has rabies, communicates it to a man, or cow, or horse, to which it proves fatal, but the hen, without the aid of the Gibier Institute, recovers.

It is not my intention in this paper to call in question the practice instituted by M. Pasteur, but to refer to the great increase of reputed hydrophobia cases since he commenced to inoculate persons in order to protect them. No one who has read of his practice and its results but must have been forcibly impressed by two facts: first, that reputed cases of rabies have astonishingly increased since he commenced his preventive and curative operations; and, second, that deaths from the disease, or its treatment in the hands of inoculators, are greatly in excess of the mortality prior to that time.

In the MEDICAL AND SURGICAL REPORTER, July 5, 1890, page 24, it is stated, "Of persons treated in the Pasteur Institute from May 1, 1888, to May 1, 1889, there were 13 deaths, or one death for every 128 treated."

It may be interesting to turn from the doings of M. Pasteur, and to inquire what is known of hydrophobia in our own country. There exists in the mind of all classes of people, everywhere in this country, great dread of mad dogs and of hydrophobia; a dread engendered and spread abroad by the newspaper reports of the horrible sufferings of the victims of hydrophobia; their convulsions at the sight of water or on attempts to swallow it; the distortions of face; the whining, howling and slavering, like dogs; and their being smothered under feather-beds, or bled to death to prevent them from injuring others.

On October 18, the newspapers reported that a man in Atlanta, Georgia, was so violent while under the disease, "that six men could not hold him down under a bed, but when eight men got on it, they were enabled to overcome him"—which meant smothering him, I suppose. Reports of bleeding such patients to death have been common from my earliest recollection. These things are known to every child of ten years; and is it strange, then, that the disease is regarded with peculiar horror?

When quite young—seventy years ago—a lad whom I knew "died mad," the people said. He had been bitten by a neighbor's dog which was immediately killed. It affected me greatly; so after my graduation in 1828, I applied to that museum of knowledge, Prof. John Redman Coxe, for information in regard to this disease, and from that time to the present I have been mindful of it. Prof. Coxe told me of the many kinds of creatures liable to the disease—hens were included—but the wise old man did not then know that a hen could have the disease, could infect other animals—even man, and then rid herself of it, and become food for rich citizens. That was reserved for our "Institute" to discover.

Mad dogs are not often met with in our State, or if they are, and persons are frequently bitten by them, then either the virus is nearly harmless in the human being, or we have better means of prevention than M. Pasteur's inoculation measures.

Why do I hold this opinion? Because during seventy years, with my eyes and ears wide open to see and hear all that is known on the subject, there is no record of a single well authenticated case of hydrophobia having occurred within our county, and only two supposed cases—cases of false hydrophobia perhaps—though many hundreds have been bitten by dogs said to be mad, during that period of time. If so many were bitten, how did they escape, when there was no Pasteur or Gibier to inoculate them? During nearly the whole of the present century, though the disease has not received any attention from medical teachers in our medical colleges, yet intelligent physicians throughout the State, acquainted with the teachings and experience of the justly celebrated English veterinary surgeon Youatt, practiced his teaching, and when persons who had been bitten presented themselves,

excised or cauterized the wounded part, assured the patient that he was in no danger, and no bad results followed. But physicians were seldom asked to prescribe for such patients. There were specialists then as now.

For more than a century there has been known, in the eastern part of Pennsylvania, two mad-dog doctors, to whom hundreds of people, bitten by dogs supposed to be rabid, have resorted for protection from hydrophobia.

"Dr. Stoy's Remedy for Hydrophobia" was known in the latter part of the last century, it is said, throughout Pennsylvania and in parts of the adjoining States, and was regarded as a certain preventive of hydrophobia. The following history was given to me a few years ago, by a friend. "Dr. Wm. Stoy was a native of Germany, who came to this country before the year 1800, and settled in Dauphin County, Pa. He devoted much of his time to the study of chemistry. Soon after his arrival he petitioned Congress for the grant of a large sum of money, on condition that he should promulgate his great discovery, for the cure of hydrophobia, for the public benefit. Failing in this, he then offered his recipe to the heads of families at a fixed price, binding them, however, under oath not to divulge the secret, or to use it for the benefit of others. After his death in 1809, his widow Elizabeth Stoy, took out a patent for this medicine. One who bought a "right" kept his oath so religiously that he allowed a neighbor who had been bitten by a rabid dog to die rather than violate his oath. Among the papers of one who had purchased the recipe, it was found after his death, written in German. It was translated into English, and is as follows.

"Take one handful of dried Anagallis Arvensis;[1] pour on it two quarts of good beer in an earthen pot; boil it over a slow fire to half the volume; strain through a cloth; add of vermilion treacle two drachms. It must be well stirred up and mixed in liquor. Dose for a man, one pint, to be taken in the morning, fasting. If any signs of hydrophobia appear, the medicine should be taken two or three mornings in succession. The dose for a female, three to three and one-half gills, for children according to age." Many years ago the following was published.

[1] This is the common pimpernel.—ED. REPORTER.

"MAD DOGS.—THE STOY REMEDY."

"In 1819, one Valentine Kectering, of Dauphin County, communicated to the Senate of Pennsylvania a sure remedy for the bite of any mad animal. His ancestors had used it in Germany two hundred and fifty-six years ago, and he had always found it to answer the purpose during a residence in the United States, of fifty years. He only published it from motives of humanity. This remedy consists in the weed called chick-weed—a summer plant, called by Germans and Swiss, Gauchnell Rother Mayor, or Rother Huehnerdarm, in England called Red Pimpernel; botanical name, *Angelica Phœnicia*. It must be gathered when in full bloom, in June, dried in the shade and pulverized. Dose for a grown person is a teaspoonful (in weight a drachm and a scruple) at once, in beer or water. For children, the dose is the same, but must be applied at three different times. It can also be put on bread and butter, or given in honey or molasses. The Rev. Mr. Muhlenberg said that in Germany thirty grains of this powder are given four times the first day; then once a day for a week; while at the same time the part is washed out with a decoction of the weed, and the powder strewed on it. Mr. Kectering said, that he, in all instances, gave but one dose with the most happy results. This is said to be the same remedy through which the late Dr. William Stoy effected so many cures."

I may remark here that he speaks of the plant as Angelica Phœnicia; while in Stoy's recipe it is spoken of as the *Anagallis Arvensis*, which is the botanical name of the red pimpernels. They evidently used the same plant.

During the long time in which Stoy and others used this remedy another man, or rather family, in Montgomery County, were celebrated as "mad-dog doctors." "Dr. Fry," the great mad-dog doctor, was a familiar name to me full seventy years ago; and as hundreds of people in this and adjoining counties have resorted to them for protection and cure, and always, it is reported, with success, allow me to speak of them. Even within my circle of practice many people have gone to him, and not a single one was a victim to the dreaded disease. As many of the persons were members of families with whom I practiced, I had frequent opportunities to see the printed directions, which are as follows.

"First wash the bite of the dog with warm

vinegar; then apply the blister to reach a little over the sore; tie it up; let the blister lay on for ten hours; when it has drawn a full blister, then open the blister and keep it off. Then take cabbage leaves and make them warm on the stove and soft in the hands; then apply them and let them lay on for two hours; then apply fresh leaves, and so continue till four days have expired; then apply the same blister again; let it lay on three or four hours; then take it off and dress with cabbage leaves, as before mentioned until fourteen days have expired; then spread a rag with sheep's tallow twice a day applied till it is healed."

"Medicine for hydrophobia. Take all this powder and put it in a new earthen pot; pour one pint of porter on it, and set the said pot on a low or moderate coal fire; let it boil down to one-half; then strain it through a clean linen cloth, hot out of the pot, into a pewter dish; then take the medicine out of the bottle and mix it well together, and when it is well united, then give to the patient one-fourth of the dose in the morning, fasting, lukewarm, and the remainder, the next four mornings in succession, as before mentioned, and the patient after taking each dose, must fast three hours, and fourteen days' thereafter shall drink no water, not to meddle with water and not to see any water, and not to eat any pork or pies baked with lard, except butter, not to eat any fish or water-fowl that swims in water for fourteen days thereafter, and not to go in the rain or where it is foggy.—W. S. Fry; near Lansdale." "Dr. George S. Fry, Catharine Fry."

The above mode of treatment has been strictly followed by a great many people in our county and the adjoining ones.

Since Dr. Gibier opened his Institute in New York, and his reports have so excited the people's fears that cases of hydrophobia have greatly increased, I felt a desire to talk with our mad-dog doctor and learn from his own lips what his success has been. So, a few weeks since, I rode to Lansdale and visited him in his little store. When introduced to him by the friend who was with me, I said to him that I had come to see him in relation to his treatment of hydrophobia; the number treated by all the members of the Fry family, and their success in treatment. He quickly replied: "We never lost a single patient." "How many have you treated?" "More than three hundred." "Have you ever treated one when the disease was upon him?" "Yes! More than one, and they recovered." By this time he seemed to get a little suspicious that I had some secret motive for asking questions, and he became somewhat reserved. I then said to him: "I do not want to know anything about your remedies; and, to be frank with you, I have no belief in their possessing any medicinal value in preventing hydrophobia, but possibly great value, when conjoined with the assurance which you give the patient in removing the perturbed condition of the nervous system, and inspiring them with a firm assured hope—confidence I may say—of protection." This seemed to remove all reserve on his part. "Doctor, are you not in error in saying that you have never lost a patient, did not you lose young Yerkes?" "Ah! he died; but it was his own fault; the three boys were all bitten. The other two followed the directions for the whole fourteen days; but that young fellow, after being in the room two days, jumped out of the window and went to swim with neighbor's boys." The boy's uncle had told me that the boy had fully followed all directions, but I pressed Dr. Fry no further, but said to him: "I have been told that you use the same remedy that was used by Dr. Stoy—the red pimpernel." "Yes! we use *that;* but we have five other ingredients." He narrated a severe case of the disease to which his father had been called, and which he cured.

The readers of the REPORTER will doubtless ask, why I have thought it necessary to speak of the unscientific practice of these non-professional men, and especially as I do not believe their remedies have any medicinal effect of value in the treatment of the disease?

The object in treatment should be to prevent the occurrence of disease, and, if present, to cure it. It appears that many persons have lost their lives after treatment by Pasteur, yet he boasts of great success. From his own statement, one out of every one hundred and twenty-eight died, but the *Journal de Médecine*, March 30, contains a list of ninety cases who have died after receiving the so-called "preventive treatment." In addition to that, it is said to be a fact, that since it has been practiced, there has been an actual increase in the number of deaths from hydrophobia in France. And a similar increase is said to have been noted in New York as a result of the excite-

ment caused by the existence of the Institute there.

Now, everywhere in this State the confidence of the masses in the power of the mad-dog doctors seems to be so great, that even when bitten by a dog supposed to be rabid, their nervous systems are not so disturbed as to lead to fatal results. Dr. Fry says that out of more than three hundred who were bitten and treated by him, not one was lost by hydrophobia, after their treatment. Pasteur has lost many—Fry not one; or, if any, only one. It is seventy years since the little boy, Rossiter, died from what was called hydrophobia; and I do not know that he received Fry's treatment. I know of no other one in all these years, anywhere in the county—though scores have been bitten—who died from rabies, whether treated by Fry, or by physicians, or not treated at all.

I wish to be fair towards the Pasteur Institute, and therefore regret that I have not access to their reports up to this time. In the MEDICAL AND SURGICAL REPORTER of October 25, 1890, which has just come to me, I find "Hydrophobia Notes," from which I gather that a patient died in the Bellevue Hospital with his arms tied to the side of the bed and four men holding him, while the physician dosed him with morphia and gave him chloral. Gibier says it was a genuine case of hydrophobia. I have no knowledge of the case save this. Whether the man was bitten at all, and what the symptoms were which made it necessary to tie him to the bed and have four men to hold him, I do not know; but I do know that the physicians of that hospital should not have allowed such a report to be sent abroad, through the newspapers, and even Dr. Gibier's declaration that it was a true case of hydrophobia may be honestly questioned by those who are well read in the history of hydrophobia. In the August number of the *North American Review*, there is a paper on "False Hydrophobia," by Dr. Wm. A. Hammond, Surgeon-General, U. S. Army (retired), in which, on pages 170 and 171, he writes, "Several years ago I saw, in consultation, a policeman who had two or three days before been bitten by a dog, and whose comrades had frightened him by their inquiries and suggestions. He was then in the Park Hospital, in the city of New York, held down by four strong men, and snapping like a dog at every one who came near him. At the sight of water, he became intensely excited, and went through a series of fearful contortions of his face. He had visions of mad dogs trying to bite him, and was hiding his face under the bed-clothes. Every attempt to make him drink a glass of water produced a series of spasms and howls of anguish that alarmed the neighborhood. The short period of the incubation, the extreme violence of the symptoms, and the fact that he had drunk a glass or two of brandy without difficulty, gave me at once a clear idea of the case. I filled a tumbler with ice-cold water and holding it to his lips told him in a commanding tone to drink it immediately. He took the tumbler in his hand and drank it as readily as he had ever done in his life. The spell was broken, and a few minutes afterwards he got out of bed declaring that he was perfectly well, and he went to duty the next morning. It is quite within the limits of probability that if he had been allowed to go on for two or three days in the way he had begun, death from exhaustion would have been the consequence.

"That death may result from false hydrophobia is as well established as any other fact in medical science. There is a case on record of a man who died in fifteen hours with all the symptoms of hydrophobia which had ensued on a violent paroxysm of anger."

Dr. Hammond gives other most interesting cases of false hydrophobia, which I must leave for the present, but which ought to be known to all physicians, so that when standing by the bedside of such a patient they should not require the man to be bound to the bed and have strong men to sit on him, or smother him under the bed; but should be able to distinguish the false hydrophobia from the true—if there be a true—and use means to cure him. And let me add here, that whenever the patient exhibits very violent symptoms, it is almost positive proof that it is the false kind. I have received from my friend and neighbor, Dr. Oscar Leedom, an account of a case to which he was called a few years since, which may be interesting to practitioners.

"I was called one evening in the fall of 1882 to see a young man supposed to be suffering with hydrophobia. Upon arriving at the house I found the family in a great state of excitement. His mother, an intelligent and honest woman, told me that he had been bitten by a dog a short time before, and that she feared he was getting hydrophobia. I allayed her fears as much as possible, and asked to see the patient. I

found a young man of twenty-five years in a dark room, while two strong neighbors were holding the door. At my request they opened it, when I found the patient going round and round the room on all fours, like a dog, and imitating a dog's gait and antics as nearly as possible. He continued this for some time, then suddenly darted out of the room to an adjoining one, still going on his hands and feet. I then had him caught and held by the two men, while I assured him that he had no hydrophobia whatever, and that he must quit his antics, or I would have him held under the pump and have the cold water pumped on him. This quieted him somewhat, but on releasing him he darted off again, into the back room, and began to go round on his hands and feet, dog-like, again. I then had the two men to seize him and drag him into the kitchen where stood the pump, where I determined to pump water upon him. This brought him to his senses, and he begged us to let him go. I told him I would only let him off, on his promise to do as I bid him. To this he agreed. I then gave him one-quarter grain of sulphate of morphia, and told him to go to bed. He swallowed the medicine, and then hurried up stairs to bed. There was no more trouble with him that night, and next morning he was well and ready for work. So ended my case."

How applicable here are the remarks made by Dr. Hammond in closing his case: "If this man had been allowed to go on for two or three days as he had begun, that death from exhaustion would have been the consequence." Suppose that Dr. Leedom, instead of assuming a tone of authority and determination, had, as seems to be the usual custom with physicians, been afraid to go near to the patient, had gotten some one to get a cup of water—after he had him secured—and had asked him to drink it; would he not have shrunk from it, have been thrown into spasms as is so usual in such cases, and it have resulted in his death?

As we have looked somewhat into the doings of the Paris Institute, let us turn our attention to Dr. Gibier's Institute in New York. In the MEDICAL AND SURGICAL REPORTER it is stated that thirty-nine persons were bitten by animals supposed to be rabid; that many of the animals were not known to be rabid; indeed there was not a single case known to be so. That those who were bitten were badly frightened people who had heard of Pasteur's treatment is apparent from the fact that many of them came from far away States. In the cases of the boy of twelve years, bitten two weeks before he reached the Gibier Institute, and the old man of 70, bitten twenty-eight days previous to reaching there, Dr. Gibier refused to treat them. Why? Fearing, we may believe, that the incubation period was nearly completed and that, if so, his remedy might fail and thus be discredited. So, instead of inoculating them—a most fortunate escape for them—he pronounced them doomed; yet they remained well. But suppose instead of refusing to treat them, he had inoculated them, and they had gone home and remained well; then they would have swelled the lists of cures, as hundreds of others like them have done. It is apparent that his confidence in his means of prevention is very weak. As for curing one already "mad," he makes no pretense to do that, but honestly says, he "has never known a case of rabies to be cured."

In the August number of the *North American Review* in a paper entitled: "The Pasteur Treatment," by Dr. Paul Gibier, Director of the Pasteur Institute in New York, he writes: "Some die fifteen or twenty days after having been bitten, others only after a few months or even years." Dr. Hammond in the same number of that Review, in a paper on "False Hydrophobia," says: "Hydrophobia rarely supervenes until after a month has elapsed after the bite; and in my cases the time has varied from twenty-five days to four months." With these facts before him, and the testimony of the celebrated and experienced veterinary surgeon Youatt, that "the excision of the wounded part, at any time prior to the attack of rabies, would insure the safety of the person," that Dr. Gibier should have refused to treat them, and to declare that they were doomed, is not readily explained, save by the theory that he had no confidence in his means of prevention. Now let us consider what has taken place all over our country in relation to persons bitten by dogs—I will not say mad dogs—as rabid as were those by whom Dr. Gibier's patients were bitten. In the country nearly every family keeps a dog; many families two or more, and country physicians are very liable to be bitten. It has been my fate many times—three times in one week I was attacked, and two of the bites received drew blood from me. So it was no doubt with hundreds of others in this State. But we did not kiss the mad-

stone, or go to the mad-dog doctors, and fortunately we had no "Institute" where we could be inoculated, so we just went on as though nothing had occurred, or as though we had never heard of danger from the bite of a dog; and yet who ever heard of the death of a country doctor from the disease called rabies? There have been thousands of persons bitten by dogs in Pennsylvania during my seventy years of observation, in relation to cases of rabies; and yet, how very few deaths from hydrophobia, true or false, have we heard of. How shall we explain this, seeing as we now do, that hundreds, yea thousands, are flocking to the Institutes, in New York and Paris, who have been bitten by mad dogs—or by healthly dogs—whose bite is, according to Dr. Gibier, capable of causing rabies in mammifera, save by saying that mad dogs are very scarce; that bites of healthy dogs cannot cause rabies; that no such case has ever occurred; and that, here, when a person was bitten by a dog and feared that he was rabid, he went at once to a physician and had the wound excised or to Dr. Stoy, who, according to the report of Kectering, used a remedy which had been successful in every case during two hundred and fifty-six years, or to Dr. Fry, who, in hundreds of cases treated by him, had never lost one, or only one.

These were the means used by many, and yet not by one-tenth of those bitten; the great majority did nothing, but like the country doctors, gave themselves no trouble about it.

But let us look into Dr. Fry's "Institute." In it we see, not thirty-nine, but three hundred or more, men, women and children, who have been bitten by dogs (I will not say rabid dogs—as rabid, though, as were the dogs by which Dr. Gibier's patients were bitten), and whose fears have brought them to this unscientific man, of whose great power to save them they have often heard. They came with strong faith that as soon as they were under his treatment they would be safe. He does not terrify them—turns none away through fear that they may have nearly reached the end of the incubation period, but with a strong confidence in his measures, begotten by a half century's unvarying success, inspires them with a joyous hope and from under his hands they pass away relieved from fear and protected, one and all, from the dreaded rabies.

And, now, what has been the outcome in all Pennsylvania to those who took no measures to protect themselves, others who sought relief from physicians, and those who trusted themselves to the mad-dog doctors, Stoy and Fry? I answer, as I think physicians throughout the State will, that we have scarcely had a well-authenticated case of true rabies in all this populous State. But alongside of what has happened here, how frightful are the reports which come to us of deaths under the inoculation measures in Paris. Do I believe that because Fry and Stoy lost none and Pasteur many, very many, by death, that the medicine given by the former, and the apparently absurd precautions and course of diet and conduct prescribed by him were necessary? I believe the medicine, and all else advised, were entirely useless, save only as they served to allay the fears of the patients and confirmed them in a belief of their own safety. If, then, my opinion is correct, that the medicine had no value as an antidote to the poison of rabies, it must be plain to my readers that the dogs—the hundreds said to be mad—were not so; and this is the reason why the hundreds—thousands of persons, I might say—bitten by dogs in Pennsylvania during the past century did not become victims to true hydrophobia, though a few may have fallen victims to false hydrophobia—an affection so ably described by Dr. Hammond, who is the peer of physicians of the "Institutes" in this or any other country.

I believe there is a disease called rabies, to which dogs are liable, and I always heretofore *have* believed that it could, by the bite of a rabid dog, be communicated to the human system; but now it seems as though false hydrophobia may yet include all cases which may happen in human beings. Time and more careful observations than have heretofore been made will soon reach the truth in this matter. Until then, I hope that physicians will earnestly investigate the subject, and that all medical colleges will have it embodied in their course on the "Practice of Medicine," and that Pennsylvania will be saved from the dangers which would follow the erection of a Pasteur Institute within her borders.

It is said the mark of weak medical men is the indiscriminate use of stimulants in fevers, a ready resort to narcotics and sedatives, treatment of symptoms only and a fondness for new drugs and high-sounding names.

ATMOSPHERIC TRACTOR.

A NEW INSTRUMENT, AND SOME NEW THEORIES IN OBSTETRICS.[1]

BY PETER McCAHEY, M. D.,
PHILADELPHIA.

On December 20, 1848, and February 7, 1849, Professor J. Y. Simpson, of Edinburgh, described before the Obstetric and Medico-Chirurgical Societies of that city, a device for assisting labor which he termed an Air-Tractor. In its first form it consisted of an ordinary metallic vaginal speculum, fitted with a piston and coated with leather at its cone-shaped end. This was finally discarded for a short brass syringe attached to an inner cup of horn, which was covered with an outer cup of rubber. The mouth of the inner cup was covered with a diaphragm of wire, within which was a piece of sponge or flannel, "with the view of preventing injury to the scalp and not allowing it to be elongated and drawn up into the vacuous space in the manner which we see occurring in the skin in the common operation of cupping. Such an instrument when fixed to the palm of the hand lifted readily a weight of thirty or forty pounds. This Dr. Simpson showed by experiments before this society." (Simpson's *Obstetric Memoirs:* Philadelphia, 1855.)

Professor Simpson in his eloquent and thoughtful manner pointed out the dangers incidental to prolonged labor and also to the use of the forceps, and declared his belief that the air-tractor would eventually prove a substitute for them in many cases. He explained the well-known principle of atmospheric pressure upon which it was based, and referred to the many instances in which the same principle is employed by the lower animals, such as the leech, the limpet and the cuttle-fish, to secure their food or to move about. He added that while the Tractor had been used in several cases "with results answering his best expectations, it admitted of much further improvement in construction, in mode of application, in working and in other details."

Unfortunately for humanity, it did not work, and was finally abandoned by its gifted inventor. So complete was its failure that, although Dr. Simpson lived until 1855, he did not publish any more in reference to it, nor is it mentioned even as a curiosity by any of his English or American contemporaries or successors.

Dr. Horatio R. Storer, the American editor of Professor Simpson's *Obstetric Memoirs*, stated in 1855 that "the chief objection to the practical use of the tractor is doubtless in its application, and not in its power of traction; the large size of the caoutchouc cup rendering difficult its introduction within the maternal passages. To this may be added the difficulty of keeping the valves in working order. Dr. Simpson, however, holds, and we believe, correctly, that if ingenuity could suggest any form of tractor which umbrella-like should be folded into a little space for introduction and afterwards expanded over the scalp and then exhausted by the attached piston, it might supersede the forceps in many cases. . . . When we revert to the history of some of our most useful obstetric instruments (contrast, for example, the rude form of the early forceps with their present improved construction), we have reason to hope that the tractor may at some future time be so far improved as to be easily applied and used."

Dr. Simpson's tractor failed partly because of the difficulty of working an air-pump within the vaginal canal, and partly because of defects in the construction of the cup.

If I had read of his failure, I would probably have considered it hopeless to try further experiments in the same direction.

In common with a great number of others, I had not heard or read of them until after I had, as the result of independent inquiry and over five years of study and experiments, constructed a new and entirely practicable Atmospheric Tractor. On learning a few weeks ago of Dr. Simpson's efforts, I was at first disappointed to find that I was not, as I had supposed, the first to suggest its use. After further consideration, however, I think it will be admitted to be as great an honor to have succeeded where so brilliant an obstetrician and so able a man as Professor Simpson failed, as to have evolved the original idea.

I began the study of the subject in 1885, in the hope of finding some means of preventing the annoying retrocession of the head. I at first endeavored to secure this by a modification of the old abdominal bandage; but the forces driving the head back were stronger than any power that could be exerted with the bandage. This

[1] Report of a demonstration before the Philadelphia County Medical Society, November 26, 1890.

led me to think that there must be some other agency producing the retrocession besides muscular resistance and bony rigidity. No doubt every physician has observed many cases in which the head retroceded, not only before the pelvic muscles could act, but even before it reached the pelvic floor. Further reflection and observation led me to the conclusion that atmospheric resistance is the principal factor in producing this retrocession and is in many cases a potent factor in delaying delivery.

When the uterus contracts round the body of the child, it expels all or nearly all the air from the uterine cavity, just as, when the hand firmly grasps a ball, the air is squeezed out from between it and the palm and fingers. The abdominal muscles then contract, forcing the fundus of the uterus down and pushing the child's body and head into the pelvic cavity. While this is occurring, there is a partial vacuum in the upper part of the uterus or that portion of it which is firmly contracted around the child. When the abdominal muscles relax, the pressure of the external air, and the expansive pressure of the air in the vagina are exerted against the head and shoulders of the child, and force it back until sufficient air enters the uterus to overcome or break up the vacuum and elevate the fundus. A similar process can be observed every day in the use of the ordinary ball-valve cupping apparatus. Pressure on the top of the ball drives out a certain quantity of air from the cup, but in a moment or two the expansive pressure of the remaining air forces the ball into its usual globular shape. The advantageous results which have been obtained by moving the forceps from side to side in cases where extraction is difficult, can readily be accounted for when it is realized that such motion permits the free ingress of air from the vagina and breaks up the uterine vacuum.

That the retrocession of the head is due to atmospheric pressure almost altogether and only in a small degree to muscular resistance or pelvic rigidity, must be obvious to those who have felt the head stop and recede before it had reached the pelvic floor and while it was still suspended in space, a half an inch or more above the muscles.

Professor Duncan (Duncan's *Obstetric Essays*), who must have frequently noticed this apparent anomaly, realized the inadequacy of the commonly accepted theories on the subject, and ascribed the retrocession in such cases to the "retentivity of the abdomen," but failed to perceive that this retentivity is almost entirely the result of atmospheric pressure.

Being convinced that atmospheric pressure is one of the principal causes of delayed labor, and knowing that there is nothing more easily displaceable than air, I began to work upon the problem of how to lessen or remove it during labor. I am convinced that I have succeeded and that the atmospheric tractor which I have the honor to demonstrate before you this evening will inaugurate a new era in the history and practice of the Obstetric Art. It will be, not only a substitute for the forceps in cases in which instrumental aid is absolutely necessary, but it will also be an indispensable assistant in cases which are usually left to the tedious and painful efforts of Nature. With it the physician can dispense with anæsthetics and reduce the expulsive stage of labor to a few minutes, instead of hours, the agony of child-birth will be reduced to an infinitesimal degree without incurring any risk or inflicting any injury on either the mother or the child, and many lives will be saved which would otherwise be lost.

The operation is extremely simple. It consists in applying a cup or concave disk of rubber or other air-tight flexible material, to the child's head, and creating a vacuum within or beneath, so that it will be firmly affixed to the head by atmospheric pressure, and then making traction on the handle of the cup or disk. Any amount of desired power can be obtained by employing a cup of sufficient area. The normal pressure of the atmosphere being fifteen pounds to the square inch, it is obvious that the tractile power capable of being exerted through a cup or disk of four square inches of area, and within or beneath which a vacuum has been formed, will be sixty pounds. The cup which I have here, covers when expanded a surface of about five square inches. If the vacuum beneath it were perfect and if the surface to which it is affixed were homogeneous, polished and solidly coherent, it would furnish a tractile force of almost seventy-five pounds. Allowing fifty per cent. for the loss of power consequent upon the elasticity of the cup, the flexible character of the scalp, and the mechanical impossibility of producing a complete vacuum, there will still be left a force of thirty-seven and a half pounds, which when properly applied is more than

sufficient to quickly and safely terminate any case of labor. It has been claimed that there are cases in which an enormous force is requisite, cases where the physician has been obliged to pull upon the forceps with all his force and even to ask an assistant to furnish additional power. Reflection will show, however, that in no such case has the physician exerted his entire muscular strength in endeavoring to extract the child. He may think he did, but he was involuntarily prevented from so doing, partly through the intuitive fear of injuring the mother or the child and partly by the expenditure of a considerable amount of his strength in maintaining his own equilibrium. Were a physician in any such case to exert his whole muscular force, he would pull patient and child out of the bed or haul both the bed and the patient around the room.

The large amount of force apparently required in some cases is because it is misdirected. The head is not properly flexed, and traction is exerted in a direction that would tend to pull the occiput through the pubic symphisis, instead of under the pubic arch, and it must be remembered that a great amount of force is unconsciously expended in maintaining the grip of the forceps on the child's head, especially if traction be made at the moment when the uterine vacuum is most complete. Experiment with any globular surface will show that unless increased pressure accompany the tractile efforts, the jaws of the forceps will be expanded and slip uselessly over the body that they were intended to move.

Scientific manipulation is the requisite in obstetrics, and not great force misapplied. If the occiput be lowered so that the head can revolve or pivot against and under the pubic arch, the voluntary or involuntary contraction of the child's posterior cervical muscles will be sufficient in many cases to throw the face upwards and outwards and facilitate or complete delivery. If the head be in a proper position for this final upward and outward rotary movement, comparatively little force is needed to complete delivery. Professor Duncan in his researches upon the power employed in labor arrived at the conclusion that "the maximum force in the most difficult labors does not exceed eighty pounds; that the great majority of labors are completed by the propelling force not exceeding forty pounds, and that in the easiest labors comparatively no force at all is exerted, the child gliding into the world by its own weight." An examination of his calculations will show that these estimates of eighty and forty pounds are much too high. He made the mistake of confounding the result of the force employed with the force itself. His experiments, briefly stated, consisted in fastening a series of sections of the amnion over a conical vessel, the mouth of which was about sixteen square inches in area. He connected this with a water-pipe of one inch in area and found that the amnions of minimum strength were ruptured when the pressure on the water in the pipe reached four ounces and those of maximum strength, when it reached three and one-tenth pounds. He then calculated that if the pressure on one square inch of the strongest membrane at the time of its rupture was three and one-tenth pounds, the pressure on the entire thirteen square inches of it, when the bag of waters was projecting through the os into the vagina, would be forty pounds. This was correct, but he erred in assuming that this forty pounds manifestation of pressure implied that there was forty pounds of force exerted to produce it. The laws of hydrodynamics and the laws of the multiplication of forces show that there is a very great disproportion between a force and its results or between the power exerted and the weight which that power will move. A force of one pound in the tube of the water bellows will lift one hundred pounds on its surface. A man with a crow-bar can move ten or fifteen tons. It may, therefore, be safely assumed that the bursting of the membranes under a pressure of three pounds to the square inch does not mean that there is a force of forty pounds or more exerted against the other end of the uterus. The proposition that eighty pounds of force is exerted in other cases as the result of muscular efforts is not much less extravagant than the assertion in *Tristram Shandy* that the force of the efforts in strong labor pains is equal upon an average to the weight of four hundred and seventy pounds, acting perpendicularly upon the head of the child. A force of eighty pounds applied to the body of an unborn infant weighing five or six pounds would be equivalent to a force of two thousand pounds applied to the body of an average adult—more than sufficient in either case to produce immediate death.

Exerted as a tractile force, eighty pounds of power will move a weight of four hun-

dred pounds, which is more than the usual weight of the bed, patient and child combined.

The problem in labor is to move a two-pound head two inches in one direction and eight or nine inches in another, through a channel, the walls of which are soft and yielding and covered with an unctuous secretion—conditions which reduce the element of friction to the lowest point. The occiput is only required to traverse the depth of the pubic symphisis, while the forehead and chin must traverse the entire depth of the pelvic cavity and extended perineum. It is obvious that the most rational way of accomplishing this complex movement is not to attempt to make the head advance as a whole, but to move one end first and then the other.

With the forceps the head must be moved more or less as a whole along the imaginary curve of Carus. With the forceps, practically nothing can be done but to pull. Rotation may be attempted, but in trying to perform it the points of the blades may, and often do, inflict serious injury upon the maternal tissues.

With the Atmospheric Tractor nothing is more easy than to apply it to the upper portion of the head and bring down the occiput. It may then be applied to the lower portion of the cranium, and the forehead and chin may be easily drawn upwards and outwards, and delivery completed. If the head is caught on the pubic bone, as in a semi-frontal or brow presentation, it can be easily pushed back with the tractor, and then depressed or rotated in any desired manner before being brought down. The tractor is practically a clamp which can be firmly attached to a large area of the surface, placing the head under the absolute control of the physician and enabling him to lift it, to turn it and to move it in any desired manner.

In order to apply it, all that is necessary is to see first that the os uteri is sufficiently dilated or dilatable to permit of its introduction. After having decided on the part of the head to which it is to be applied, place one hand against the abdominal projection, in order to prevent the head from receding, and introduce the tractor into the vagina or within the os, and firmly press it against the child's head until the handle or vacuum producer has driven out all the air from within the disk or cup. The handle can then be grasped, and extraction proceeded with. If, as occasionally happens, the head is dry, it ought to be moistened with water, or rubbed with some unctuous material.

The principal objections which may be urged against the use of the tractor are:

1. That the hair on the child's head will prevent it from being firmly applied.
2. That it is difficult to apply.
3. That its application will require injurious force.
4. That when applied it will exert injurious pressure.
5. That it will act as a cupping glass, producing an unsightly swelling, or even—as has been thoughtlessly asserted– "draw out the child's brains."
6. That in using it the scalp might be torn off.
7. It will carry infection.

The first of these objections I will dispose of by a practical illustration. (Dr. McCahey here affixed the tractor on the head of an infant three weeks old, and after moving it around a cot which had been provided for the purpose, lifted it up in the air two or three times, the tractor remaining in position all the time and the child apparently suffering no pain.) These, and other objections which may be raised, are based upon a misapprehension or a forgetfulness of the laws of hydro-dynamics.

As to the second objection, as you have just seen, the tractor is not difficult of application. As to the third, the amount of force necessary to create the desired vacuum is less than ten pounds at starting and decreases to almost nothing as the air is driven out of the cup, and it is exerted not on the head, but on the air within the cup.

The tractor cannot exert injurious pressure on the head. With it on the head there is no more pressure upon the area it covers than before it was applied. It merely takes the place of the lowest strata of air and is held against the scalp by the ordinary atmospheric pressure.

It will not act as a cupping glass, because it is applied flat against a large area, while a cupping glass is applied against a narrow circle, into which it is driven by the overlying air.

It will not produce an unsightly swelling, because there is no cavity into which an effusion can take place, and even if there were a large central opening, the brain would not be sucked up into it, because there is no internal pressure sufficiently

strong to force the brain either through or against the scalp. The tractor may be applied with absolute safety over either the bony part of the skull or over the fontanelles.

There is no danger of detaching the scalp because the tractor is not sewed or glued to the skin. It is affixed against it by a certain atmospheric pressure. Traction exerted in excess of that pressure will merely result in a separation of the disk from the scalp and not the tearing of the scalp from the bones. It can thus be seen that injurious or excessive force cannot be employed with it.

It is well to remember in this connection that while we speak of making traction on the head with the apparatus, and while we do apparently pull the head and lift the child with it, in reality we simply relieve the front of the head from the pressure of a five-inch cylindrical column of air, thereby allowing the head to be moved forward or the child to be lifted by the expansive force of the air behind or beneath it. No greater force of traction can possibly be excited by this apparatus because at the instant when it passes beyond eight or ten pounds to the square inch, it will separate from the head.

If the disk or cup were left on the head for a long time it might produce a slight congestion of the skin or even a small swelling, but nothing comparable to the caput succedaneum or the cephalhematoma sometimes occurring, which are the result of continuous pressure against the rigid os or the bony pelvis. Even if there were a slight discoloration or effusion, it would be certain to pass away in a few hours or days, and must not be allowed to weigh for one moment against the instantaneous relief from pain and the quick and safe delivery obtained by the employment of the tractor.

Pain is due to the resistance met with by muscular action. The resistance encountered by the abdominal muscles when pressing the head of the child against the bony pelvis is productive of intense pain. If the position of the head be changed with the tractor, and the abdominal muscles be relieved of the necessity of expelling the child, the pain ceases as if by magic.

The danger from infection is absolutely nil, if ordinary cleanliness be observed. After using the tractor all that is necessary to purify it for the next case, is to place it for a few minutes in boiling water or any antiseptic solution.

I have constructed various forms of tractors, some with a ball-valve, some with an air-cock, to which a rubber tube three or four feet long was attached, and an air-pump adjusted at the other end of the tube so that the nurse or other attendant could readily produce the desired vacuum, some with curved edges, some with concave edges; but the form I have exhibited to-night is the most readily applicable and the most reliable and best. As you see, it flattens itself out when applied to the head, thus giving an area of contact and traction equal to its entire surface. With the other forms, traction and contact can be obtained only within a limited area around the circumference.

The cups in which the air is exhausted by means of a pump or a ball-valve are open to the serious objection that their valves would become clogged up with the material on the child's head, which would require that they should be taken apart and cleaned or discarded entirely after each case.

I have used the Tractor in five cases, and in each case effected delivery with it in five minutes. Without it labor would have been prolonged in all for hours—hours of suffering to the mothers and hours of more or less anxiety to the attendant. An instrument capable of producing such beneficial results is certain to be universally employed within a comparatively brief period.

PERISCOPE.

Posthumous Labor.

In connection with the item on posthumous labor, in the REPORTER, October 4 and November 1, we quote the following letter of J. H. Nankivell, M. R. C. S., District Surgeon of the Transkei, South Africa, from the *Lancet*, October 18, 1890:—"In your issue of July 19 there is a notice of a reputed case of posthumous labor occurring at Moglia in the province of Mantua. In February, 1888, I made a post-mortem examination at mid-day on Sunday of the body of a woman who died before noon on the preceding Friday. After her death the friends sent four miles away to a shop for materials for a shroud, made the shroud, and put it on the body. On Saturday they put her into a coffin. On my arrival, in company with a magistrate, they informed me that the deceased died in the sixth or seventh month of pregnancy, and because

two or three weeks ago she had been assaulted they had reported the case to the magistrate. I opened the body in the usual way (as it lay in the coffin), and on passing my hand into the abdomen found no pregnant uterus. The astonishment of the relatives was great and evidently genuine. Upon further examination I found a large uncontracted uterus in the pelvis, and upon ripping open the remainder of the shroud, I discovered, lying under the thighs, a newly born dead child with cord and placenta attached. The friends were positive that the birth had not taken place when they lifted the body into the coffin, as from the way in which this was done two of them would have felt the child and the soiling of the shroud. Moreover, they assured me that at this time, about noon on Saturday, the corpse had an unpleasant odor and froth was oozing from the nose and mouth. When I had the lid removed in order to make my examination, there was not the least sign of the body having made any movement, ante- or post-mortem. But what struck me as strange (and the weather for two days had been cold, with drizzling rain) was that the temperature of the interior of the body was rather above than below normal. I could only come to the conclusion that the woman had died with a very high temperature from a fever which was at that time prevalent among the natives, and that the child had been expelled by the uterus certainly six hours, and in all probability more than twenty-four hours, after its mother's death. As the uterus resists decay longer than any other muscle in the body, so it may retain for a longer period after death its power of contraction. In such cases it is reasonable to suppose that the first and a portion of the second stages of labor are completed before death, and that the fetus and placenta are expelled either before rigor mortis has set in or after it has passed away."

Pennsylvania State Board of Health.

In his annual report Secretary Lee, of the Pennsylvania State Board of Health, says that the water supply of Philadelphia is the only one in the entire State, so far as he has been able to discover, which the Legislature has thought it worth while to protect. Influenza, he says, was the only widespread epidemic which visited the State during the year. Up to the last of May, 88,416 persons had been ill with the disease. Warning circulars were sent out during the year to clergymen and undertakers advising against holding public or church funerals in the case of persons who have died of contagious or infectious diseases. Smallpox appeared in but three cities—Pittsburgh, Canonsburg and Glenlyon, and only two cases of leprosy, one in Philadelphia and the other in Chester. Considerable complaint was heard during the year regarding the collections of stagnant water in the beds of abandoned canals.

As Superintendent of Vital Statistics, Dr. Lee has issued the first official "Register of Physicians in Pennsylvania by Counties," a volume of 425 pages, giving the date of registration, full name, sex, place of birth, residence, etc. The Secretary says there are many names recorded of persons holding diplomas from those infamous bogus faculties which disgraced Philadelphia some years since.

The total number of graduated physicians registered is 7,315. Of the 8,248 reported 641 are of foreign birth. The registration indicates that 7,316 are graduates of medical colleges, 2,009 being among the Alumni of Jefferson Medical College, and 1,945 among the Alumni of the University of Pennsylvania. The returns show that there are 952 physicians practicing without diplomas. There are 316 female physicians in the State.

The report recommends legislation to prevent the pollution of streams and to provide for the sanitary organization of the State.

Sterility.

The Boston *Medical and Surgical Journal*, November 13, 1890, says:

A few months ago a French author told a story of a married pair who consulted him, as they wished to have children. They had just come from the office of a well-known Parisian physician who had advised that the wife's uterus be curetted. A thorough examination revealed nothing wrong with the woman, but the husband's spermatic fluid was found to be entirely without spermatozoa, due to a previous double epididymitis. That the common opinion, that failure to produce children is probably due to some defect in the wife, is not justified, is shown by Lier and Asche, who found that out of 227 cases of sterility 132 could be credited to the man, most of them due to previous gonorrhœa. Where the man was at fault

only six per cent. recovered their power of reproduction by treatment, whereas twenty-five per cent. of the women subsequently became pregnant. The authors emphasize the importance of examination of the spermatic fluid in all supposed cases of sterility.

Trional and Tetronal.

The supplement to the *British Medical Journal*, October 18, 1890, cites the *Deutsche med. Wochenschrift* as authority for the statement that the action of trional and tetronal has been tried by Drs. Barth and Rumpel. Both these bodies are related to sulphonal? Sulphonal is diethyl-sulphon-dimethyl-methane; trional is diethyl-sulphon-methyl-ethyl-methane; tetronal is diethyl-sulphon-diethyl-methane. Trional is therefore sulphonal in which one radical of ethyl replaces one of methyl. In tetronal both radicals of ethyl are replaced by ethyl. The action of these preparations was tested in cases in which sulphonal had been proved to have a beneficial effect. Tetronal was given 74 times in 30 cases, the largest individual dose being 60 grains. It was effective in 65 instances, and did not produce any disagreeable effects. Trional was given 72 times in 40 cases, and produced sleep in 64 instances, the largest individual dose being 45 grains. In some cases lassitude and drowsiness were complained of as after-effects. In 21 cases of delirium, tetronal was given 52 times, in 10 cases trional was given 52 times; neither had any appreciable effect. The authors conclude that both these hypnotics are useful drugs, but are not superior to sulphonal. In some cases in which sulphonal did not act trional and tetronal were effective, for example, in certain nervous conditions. Both drugs seem to have fewer after-effects than sulphonal.

Isococaine, a New Anæsthetic.

The *Pharmaceutical Record*, October 20, 1890, says if ecgonin is treated with caustic soda or potassa, it changes into the isomeric isoecgonin. If the chloride of this base be suspended in alcohol, in which it is insoluble, and hydrochloric acid gas be passed into the mixture, it becomes clear. When evaporated to dryness, the residue taken up with water, the solution made alkaline and shaken with chloroform, beautiful prismatic plates of isoecgonin ethylether separate. Isococaine is obtained from this by heating with two parts of benzoylchloride for a short time in oil, both up to 150° or 160°. The melting point of isococaine is at 44° C., that of cocaine at 98°. With hydrochloric, nitric and hydrosulphuric acids, isococaine forms sparingly soluble salts. The process for making it has been patented by the firm Bohringer, in Mannheim. Its advantage over cocaine is a quicker production of anæsthesia. The oculist cannot use it, as it is even more of a local irritant than cocaine.

Cases of Prolonged Fasting.

Science, October 10, 1890, says a correspondent of the *Lancet* writes as follows: "The name of General Colletta, author of the *History of the King of Naples from 1734 to 1825* is one of the most respected in the annals of modern Italy, and his reputation for discernment and veracity may fairly be placed on a level with that of the Duke of Wellington in our own country. His description of the terrible earthquake which in 1783 devastated Calabria, and was severely felt throughout the Kingdom of the Two Sicilies, is of unquestioned authority, and from it the following incidents are extracted. They refer only to persons and animals imprisoned beneath the ruins caused by the earthquake. It is only necessary to add that the facts were ascertained by Gen. Colletta's personal investigations at the scene of the catastrophe. 1. A female child, eleven years of age, was extricated on the sixth day and lived; and another girl, sixteen years of age, Eloisa Basili, remained under ground for eleven days, holding in her arms an infant which had died on the fourth day, so that it was decomposed and putrefied at the time of her rescue. She was unable to free herself from the shocking burden in her arms, so closely were they hemmed it by the fallen wreckage. 2. More wonderful still, as regards duration of life, were certain cases that occurred among animals. Two she-mules existed under a heap of ruins, the one twenty-two days, the other twenty-three; a fowl lived for twenty-two days; and a pair of hogs, which were completely entombed, remained alive thirty-two days. The human beings who had undergone these unwonted privations, when interrogated as to their sensations, replied, 'I can recollect only up to a certain point, and then I fell asleep.' When it is remembered that all the creatures thus circum-

stanced were deprived entirely of water or other liquids, it is hardly to be wondered at, that, though there was no desire for solid food, they displayed on their liberation an insatiable thirst, and, the author adds, partial blindness—*sete inestinguibile e quasi cecità.*"

Resuscitation of the Apparently Drowned.

The *Medical Record*, Nov. 8, 1890, says: For the revival of persons who have been nearly drowned, two chief methods (with numerous slight modifications of each) are in use: the "Sylvester" and the "Marshall Hall." In 1862, a committee appointed by the Royal Medical and Chirurgical Society of London, to consider the rival claims of the two methods, reported in favor of the method of Sylvester, on the ground that the amount of air introduced into healthy lungs by this method was double that introduced by the method of Marshall Hall. The committee recommended that the body should be placed at an angle of thirty degrees, face downward, with the head lower than the feet, the mouth being open and the tongue drawn forward. The escape of fluids might be assisted by slight pressure on the back. After a few seconds the body should be laid back downward with a cushion under the shoulders, the tongue hanging out of the mouth. About fourteen times a minute the arms should be drawn above the head and then lowered and pressed, by the elbows, against the chest.

In the Transactions of the above-mentioned Society for 1889, Dr. Bowles criticises very earnestly the conclusions of the committee, which had been endorsed by the Society. The committee based its report upon experiments made with the *empty* lungs of animals. The physician, however, has to deal with human beings whose lungs are filled with fluid, mixed with air in a blood-stained froth. Under these conditions the most useful method must provide not only for the inspiration of air, but also for the escape of this frothy liquid from the deeper air passages. The sudden introduction of a large quantity of air by the Sylvester method is injurious, because at the same time the froth is drawn deeply into the finest tubes, which before contained a little air. By the Marshall Hall method, however, the air is introduced gently and in small quantities, and the froth is not drawn in more deeply, but is gradually expelled with each expiratory movement. Dr. Bowles supports his statements by the recital of a number of cases which he has treated.

After the patient has been placed for a moment with face downward to allow the escape of water from the mouth and throat, he is turned on the side and *kept on that side* continuously, except when (about fifteen times a minute) the body is rolled for a few seconds upon the face again. By *keeping the same side always up* the lung on that side becomes clear. Turning first one and then the other side up is dangerous, because thereby the partly cleared lung is suddenly flooded with fluid from the lung which was downward. It is better to clear one lung entirely than to have both half cleared. Each time the body is turned upon the face a little more froth and water escapes from the mouth and nostrils. If one lung is thus cleared it may escape the inflammation which results from the inspiration of water. When the upper lung has been almost cleared, Dr. Bowles finds it useful to raise the upper arm above the head as in the Sylvester method, since the entrance of larger quantities of air into the lung is now safe. Pressure on the back at each pronation assists the escape of water somewhat, and it has a good influence on the heart, aiding the propulsion of blood towards the lungs. The continued use of the prono-lateral method is an excellent mode of keeping the pharnyx clear of obstruction.

Eleventh International Medical Congress.

Dr. Guido Baccelli, President of the Accademia Medica of Rome, and Professor of Clinical Medicine at the Sapienza, presided at a recent meeting of the Società per il Bene Economico di Roma, to consider the means of ensuring the success of the next International Medical Congress to be held at Rome. Among the adjuncts to the Congress there will be an International Exposition of Hygiene. Florence, which has hitherto led in hygienic progress in Italy, has promised energetic co-operation, and Turin and Milan are expected to do likewise. Concurrently with the Medical Congress, it is expected that an International Exposition of the Industries of All Nations will be held. The early summer—May or the beginning of June—or the early autumn months—September or October—will probably be selected for the Medical Congress.

THE
MEDICAL AND SURGICAL
REPORTER.

ISSUED EVERY SATURDAY.

CHARLES W. DULLES, M.D.,
EDITOR AND PUBLISHER.

N. E. Cor. 13th and Walnut Streets,
P. O. Box 843. Philadelphia, Pa.

☞ SUGGESTIONS TO SUBSCRIBERS:
See that your address-label gives the date to which your subscription is paid.
In requesting a change of address, give the old address as well as the new one.
If your REPORTER does not reach you promptly and regularly, notify the publisher *at once*, so that the cause may be discovered and corrected.

☞ SUGGESTIONS TO CONTRIBUTORS AND CORRESPONDENTS:
Write in ink.
Write on one side of paper only.
Write on paper of the size usually used for letters.
Make as few paragraphs as possible. Punctuate carefully. Do not abbreviate or omit words like "the" and "a," or "an."
Make communications as short as possible.
NEVER ROLL A MANUSCRIPT! Try to get an envelope or wrapper which will fit it.
When it is desired to call our attention to something in a newspaper, mark the passage boldly with a colored pencil, and write on the wrapper "Marked copy." Unless this is done, newspapers are not looked at.
The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

EPIDEMIC HYSTERICAL ECSTASY.

An interesting account of an epidemic of hysterical religious ecstasy is reported by J. W. Hjelmann, in the *Finska Läkare Sällskap Handl.*, as quoted in the *Wiener Med. Presse*, June 15, 1890. The epidemic occurred in the northeastern part of Finland, and began at a dance, a girl sixteen years old being the first subject. During the course of the entertainment the patient was suddenly seized with violent convulsions. A few days later a second girl, who was taking the place of the first, was also seized with similar convulsions; and in a very short time twenty or thirty persons, mostly young women, were similarly affected. During the first part of the epidemic, the symptoms were merely those of convulsions, but later, after recovering from the convulsions, some of the patients began to preach, and the populace came from far and near to hear these—as they thought—inspired sermons. Many of the listeners had their initial convulsion during these meetings. The attacks were of a hysterical nature. In a few cases there was anæsthesia; but in the milder cases the convulsions were absent and were replaced by hysterical hiccough. In all there occurred about fifty cases, and the subjects included five men.

With the approach of winter the epidemic gradually died out, after having lasted for half a year. Hjelmann concludes by drawing attention to the fact that the province in which the epidemic existed, is almost shut off from intercourse with the outside world, and that the people's intellectual development is unusually low. A similar ecstatic religious movement had occurred in the province fifty years ago.

The study of epidemics of hysterical ecstasy takes one naturally back to the time of Mesmer, and his séances. His patients, seated around a tub of water supposed to be magnetized, would gradually become more and more excited until they were seized with violent convulsions and were conveyed to padded rooms; there to "fight it out" with their supposed or real disease. The condition thus produced was undoubtedly one of hysterical ecstasy. Similar séances were held in various parts of France, largely attended and fruitful of the same hysterical exhibitions.

In Arabia, among the Mohammedans, and in India, among the Fakirs, religious festivals are attended by similar epidemics even at the present day. An eye-witness describes such a scene as follows: It occurred at a religious festival of the Mohammedans. A "son of the Prophet" was present, in his huge green turban, and had promised to heal the sick and perform other miracles. The descendant of Mahomed sat on a canopied dais at one end of the enclosure, and in a circle around him, squatted a large number of men with

tom-toms and horns. Presently a weird chant was started, accompanied by beating of the tom-toms, which gradually increased in volume and energy, the "believers" evidently growing more and more excited. Presently a man, bared to the waist, stepped into the centre of the enclosure; lifted above his head, by point and hilt, a sword with an edge as keen as a razor's, and, crying: "There is no god but Allah, and Mahomed is His Prophet!" brought the sword violently down against his abdomen, and then fell flat on his back. The son of the Prophet then stepped from the dais and, steadied by two servants, stood upon the blade, over the man's abdomen, muttering some prayers in the meanwhile. He then returned to the dais, and the man lifted the blade from his abdomen. There was no cut!

This clever trick had a marvelous effect upon the chanting crowd. Several sprang up, and seizing axes or knives, proceeded to mutilate themselves in the most horrible manner. Others leaped, shouted and finally fell in violent convulsions, frothing at the mouth and struggling violently. The performance continued for several hours. At its close the mutilated men were carried to the Prophet, who touched their wounds and offered a prayer. No "healing" was visible. Those in convulsions and others unconscious were also carried away. These festivals last for days, often weeks, and their effects still longer.

Coming to our own country, we see similar hysterical manifestations, although of much milder type, occurring during religious revivals. While, happily, these do not become epidemic, yet cases of hysterical ecstasy, taking the shape of trances or convulsions, are frequently the outcome of emotional religious movements.

A study of hysterical ecstasy shows that it is a pathological condition, and if encouraged to any degree would result in serious injury to the subjects of it. The arousing of such conditions, whether at revivals or mesmeric séances, should therefore be vigorously discountenanced by the profession.

SUGAR IN PATHOLOGICAL EFFUSIONS.

Our knowledge of the composition of ascitic, pleuritic and other pathological effusions has been very imperfect hitherto, especially with regard to the presence in them of sugar. The investigations of Dr. William B. Ransom, therefore, which are published in the *Practioner*, October, 1890, are very welcome and deserve brief notice, even though Dr. Ransom modestly admits that his conclusions to some extent are tentative. Before examining for sugar, he removes the proteides in transudates and exudates, by boiling the fluid after faintly acidulating it with acetic acid. If this does not suffice, the fluid is evaporated to dryness on a water-bath and the residue is extracted with boiling alcohol. The tests used for sugar were the well-known ones of Fehling, of fermentation with yeast and picrate of potassium, Moore's test with liquor potassæ, and the reduction test with bismuth. For quantitative examination, the filtrate, obtained as described, was tested with Fehling's solution, the sugar being reckoned as dextrose.

Only a brief summary of Dr. Ransom's conclusions will be given. Ascitic fluids, he says, probably always contain sugar, usually not less than one-tenth of one per cent. When the ascites is due to portal obstruction the amount is greater, the average of nine cases being fifteen-hundredths of one per cent., and this increases when sugar is given as food. This fact indicates that sugar normally is absorbed by the portal vein and not by the lacteals. The fluid of ovarian cysts contains no sugar, or only a trace of it. Œdema fluids, on the contrary, contain sugar, but not more than one-tenth of one per cent. Inflammatory serous effusions, as in blisters and pleurisy, contain sugar in less amount and less constantly than do transudates, the sugar probably being absorbed by the out-wandering leucocytes. Pus contains

no sugar. Hydrocele fluid, when free from degenerative products, contains sugar. Cerebro-spinal fluid may, under certain conditions, contain sugar, but Dr. Ransom says this is not the most constant reducing body. True sugar may also be present in hydatid fluid.

Dr. Ransom's investigations are, of course, interesting from a physiological point of view, as showing how widely distributed sugar is in the economy; but they have also a direct clinical bearing. For example, a larger percentage of sugar is to be expected in pleural and pericardial effusions than in hydro-pericardium and hydro-thorax; indeed, the presence of sugar in any amount would appear to indicate the latter rather than the former. Again, the finding of sugar in a doubtful case, suspected of being one of ovarian cyst, would make the existence of the latter disease doubtful.

We do not desire to exaggerate the importance of Dr. Ransom's results, but we think them interesting and as such deserving of notice; and we have pointed out the way in which they can be made clinically useful.

NEW WAY OF ABUSING MEDICAL CHARITY.

We fear somebody has been playing a trick on the New York *Medical Record*, which, in its issue of November 8, says:

"The celebrated surgeon, Professor Billroth, of Vienna, was asked to perform an operation upon a Russian Jew, and he agreed to do it for a fee of two hundred and fifty guineas. On making the journey to the small town in which his patient lived, he was informed that the Jew had suddenly died. However, in order that he should not suffer loss by the transaction, the Professor was asked whether he would treat five hospital patients for a fee of fifty guineas each. He accepted the offer, and did the work; and just as he was starting homeward he ascertained that one of the five patients upon whom he had operated was the Jew who was reported to have died."

This seems to be so obvious a paraphrase of a joke, published long ago in the *Fliegende Blätter* that it is impossible to avoid the conclusion that either the editor of the *Record* or Professor Billroth is not a constant reader of that admirable and entertaining journal.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

LATIN GRAMMAR OF PHARMACY AND MEDICINE. By D. H. ROBINSON, Ph. D., Professor of Latin Language and Literature, University of Kansas, with an introduction by L. E. Sayre, Ph. G., Professor of Pharmacy in, and Dean of, Department of Pharmacy, University of Kansas. Philadelphia: P. Blakiston, Son & Co., 1890. Price, $2.00.

This is a most admirable book, one which ought to be in the hands of everybody who wishes to write medical articles, and to have his prescriptions correct. It contains a great deal that nobody will care for outside of schools and colleges; but it also contains a great deal which would be invaluable to medical writers, and especially to medical editors. If the former class would devote themselves with sufficient zest to a study of this book, it would no doubt add materially to the longevity of the latter. It might not be improper, perhaps, to say that this book might be especially commended to the careful attention of writers of works on materia medica and therapeutics, as it has been some time since we have seen a work on this subject which did not contain errors such as this book is calculated to prevent.

TRANSACTIONS OF THE SOUTH CAROLINA MEDICAL ASSOCIATION. Fortieth Annual Session, at Laurens, S. C., April 23 and 24, 1890. 8vo, pp. x, 130. Charleston, S. C.: Walter, Evans & Cogswell Co., 1890.

The volume opens with the annual address of the President, Dr. James Evans, of Darlington. Dr. James G. Gilder, of Newberry, reports a case, probably of Cyst of the Spleen; Dr. T. J. McKie, of Woodlawn, inquires into the causes of Pulmonary Tuberculosis in the Negro; and Dr. Cornelius Kollock, of Cheraw, reports a Laparotomy for Uterine Fibroids. Dr. Charles W. Kollock's paper on Young Eyes, is an interesting one. He urges great watchfulness on the part of the family doctor, and details the treatment of the common eye affections of children. He also has a paper on Some Cataract Cases. Dr. R. B. Rhett, Jr., reports a case in which an Intraligamentary Cyst was successfully treated by Iodine injections, and also one on Cholecystotomy in a Pregnant Woman. Dr. R. A. Kinlock gives the details of some Laparotomies for Removal of the Uterine Appendages; Dr. O. B. Mayer, Jr., reports Two Cases of Retention of the Menses. The Report on Ophthalmology is by Dr. George Howe; that on Practice, by Dr. T. P. Bailey. Dr. Manning Simons, of Charleston, reports an interesting case of Aneurism and Arterio-venous Aneurism of the Femoral Artery and Vein; Dr. Thomas Legare,

of Charleston, has some Remarks on the Treatment of Pelvic Peritonitis. The Report on Surgery is by Dr. O. B. Mayer, Jr.; that on Obstetrics by Dr. P. G. De Saussure. Dr. E. F. Darby has a timely paper on Physical Culture.

We notice that the minutes of the meeting have been omitted from the volume; whether by accident or design does not appear. The character of the papers read shows that the Association is capable of very good work.

CORRESPONDENCE.

Consumption Among Firemen.

To the Editor.

Sir: Permit me to call renewed attention to some statements made by Dr. Mays in the Reporter of September 27, in an article on "Consumption among Firemen." Dr. Mays evidently was misinformed, or labored under a serious misapprehension of alleged facts. He states that the percentage death-rate of consumption in firemen is very high, notwithstanding that the previous health of the members of the fire departments in the respective cities from which he gained his facts was good, and notwithstanding the fact that the members are selected from a healthy class of men, that they are not exposed to any infection, and that they lead an out-door life. Hence as their circumstances are antagonistic to bacillary invasion, the excessive mortality must be due to causes other than specific infection.

I have not had either the time or inclination to inquire into the specific details of fire departments in the many cities mentioned by the author, but opportunity was afforded for inquiry into the fire department of this city, and as the facts gathered are in direct variance to those of the author referred to and contradict all his premises, his conclusions regarding all the departments are vitiated. I am indebted to the efficient clerk of the Philadelphia Fire Department for my data.

1. Are the men who now, or did, compose the Fire Department during the period of the writer's statistics (1871–1890), selected? That is, free from the hereditary taint, past or present lung disease, and not exposed to infection a short time before appointment?

Before the advent of the present government of this city, four years ago, physical examination of applicants for firemen was not held, except during two years of the term of Mayor Smith, just preceding the present term. It was notorious that men infected with consumption, with strong political influence, were placed in the Department to secure the death benefit that falls to deceased members.

Mr. Watson, who has been in the Department since its organization, informs me that 13 of the 33 who died of consumption had it before entering, and I find from the table he has given me that 5 died within two years of the time of admission, one as soon as seven months. It is interesting to note that of the actually selected men thus admitted during the past eight years, not one died of consumption. If the 13 cases are eliminated as per the above, it is seen that the deduction of more than one-third — nearly one-half—must be made from the author's percentage calculation.

2. Is the occupation of the fireman properly an out-door one?

To presume such to be the case, one must believe the city in a constant state of conflagration. The most superficial observer knows of the lazy life the fireman leads, of the fattening process he undergoes, and how in winter he whiles away hours in the rooms of the engine-house, smoking, and leading a truly enervating life.

3. Are the firemen isolated? Do they come in contact with tubercle bacilli or the expectoration of consumptives?

By the above, or the death-record of the departments, it is seen that each fire-house may have one infected person in it. Moreover, the rules of the Fire Department of Philadelphia allow a man one hour three times daily to go home, and twenty-four hours each week to spend with his family, or where he will. Is this isolation?

To prove the men who died of consumption were not infected by the tubercle bacilli, one must prove their freedom from the possibility of contamination during each hour of absence from the department.

We hold, therefore, that it is not proven that firemen are a healthy selected class of men, that their occupation is an out-door one, that they are not confined to sunless and poorly-ventilated dwellings, or that they do not come in contact with tubercle bacillus or the expectoration of consumptives, "except by chance," or finally, that consumption is the cause of one-third of their deaths.

It is to be regretted that the methods adopted by the author to prove the propositions laid down were not given with the

same mathematical precision that we know obtains in the proof for the relationship of the tubercle bacillus to tuberculosis. Any one familiar with the close reasoning and absolute step-by-step demonstration of the statements of Koch, none of which have thus far been refuted, cannot but be impatient with the lax processes that are employed to repudiate his statements. Did I not fear that I was trespassing on your valuable space it would give me great pleasure to call attention to some facts which would refute the arguments of the authorities which the learned gentleman quoted in the article just referred to, as well as some misapprehensions which he appears to be laboring under, both as to the etiology of tuberculosis and its relation to pulmonary phthisis, as well as the assertions of authorities which he quotes. I am constantly reminded, however, of the fact that so little time is given us to build up the science of medicine and add new facts, that it is scarce worth while to waste it in counteracting those who are anxious to pull down.

Yours truly,

J. H. MUSSER, M. D.

Philadelphia.

Olive-Oil for Gall-Stones.

TO THE EDITOR.

Sir: I see in the REPORTER, September 20, 1890, page 353, the report of a paper read by Dr. Burbank, denying the value of olive-oil in the treatment of gall-stones, also, the statement that what was expelled was not gall-stones, etc. This is a bold position for a doctor in the cotton-seed oil country, to take. I have used olive-oil in cases of gall-stones for some years, and can tell a gall-stone from dark-green masses, etc. I have patients who come for treatment with all the symptoms usual in those cases, and in every case the olive-oil treatment is a success. I use the pure virgin oil, and import it myself, and in every case I examine the stone carefully; therefore I am sure of what I speak. I, of course, use other medicines in those cases, as the general conditions of the constitution requires. I am now treating cases, and during the last few years have treated a large number, that had been under hypodermic injections of morphia and cocaine to allay the pain. In most of these cases I use a pill, at meals, of corrosive sublimate and iodide of potash for a few days, at the same time using the oil. My own experience proves its sure results.

Yours truly,

C. R. EARLEY, M. D.

Ridgway, Pa.

NOTES AND COMMENTS.

Local Bleeding for Congestion of the Lungs.

In *The Lancet*, November 1, 1890, Dr. J. C. Simpson reports and recommends a bold method of blood-letting directly from the substance of the lungs. He describes a case in which he did this by accident, and then other cases in which he did it deliberately. In the first the patient was a woman with Bright's disease, which was not improving under dietetic and other treatment. One day she was becoming comatose, with fibrillary muscular twitchings, and intense dyspnœa, accompanied with œdema and congestion of the lungs. Under these circumstances venesection was indicated, as the ordinary treatment for such a condition failed to relieve it. In order to render the pulmonary phlebotomy as safe as possible, the aspirator was used, and the largest canula thrust into the lung substance at the level of the ninth costal interspace on the left side, the absence of pleural effusion having been previously ascertained. No blood flowed, and after various manipulations, reducing and increasing the suction power, Dr. Simpson removed the whole of the aspirating apparatus, and very shortly after there was a free flow of blood from the canula, which had been left *in situ*. After the withdrawal of twelve ounces of blood the canula was held *in situ* with the finger over the end to allow of a clot forming, and then it was slowly withdrawn altogether. A piece of plaster was applied over the puncture, but a flannel bandage could not subsequently be retained in position. The patient was immediately and markedly relieved, both as regards the cerebral and pulmonary conditions. No effusion took place, there was only trifling hemoptysis and a suspicion of a small patch of pleurisy, without a rise of temperature. The patient remained in a greatly improved condition for a considerable time after this, though she ultimately died comatose.

A third case similarly treated was one of almost complete breakdown of compensa-

tion in cardiac disease, there being double mitral and aortic systolic murmurs as well as well-marked dilatation.

A fourth case was one which also terminated fatally, death being due to uremic convulsions. In this case, instead of a flow of blood, the œdema was so pure that only serous fluid escaped very slowly, and coagulated quickly, thus rendering the process futile. In spite of brachial venesection, which was immediately performed on account of the urgent symptoms, this patient died of the convulsions.

These are four cases in which this procedure has been carried out—intentionally and systematically in the last three. So far as Dr. Simpson is aware, deliberate puncture of the lung in such cases with the intention of depletion has not been before practiced, and it is on this account that he desired to record his cases. By some it may be said to be unjustifiable or too heroic treatment; but with this he does not agree, provided that suitable cases are chosen, and that the operator is familiar with the use and abuse of the exploring needle: in other words, that he has the manipulative skill requisite for such an operation. These cases were all of a hopeless character, and only palliation at best could be expected, except in the cardiac case, the third recorded, and in it Dr. Simpson regretted that time had been lost in ordinary medical treatment. Dr. Simpson says, Whether his method would be useful as a *dernier ressort* in cases of acute uremia with pulmonary symptoms remains to be seen; but there was certainly immediate improvement in the cases where blood was abstracted. The aim and object is to try to get the good of venesection without such a loss of blood and its subsequent retardation of convalescence. The process is analogous to a pulmonary apoplexy, which is recognized as being of the utmost benefit in certain cardiac cases, and the pulmonary lesions in both cases have a strong similarity. The broad indications for this seem to Dr. Simpson to be that the case is one which has extreme pulmonary congestion and œdema; absence of effusion into the pleural cavity; general venous stasis and cyanosis, all of which may occur in the progress of certain heart and kidney affections; and that other treatment, medicinal and mechanical, has failed to relieve the symptoms. The co-existence of such congestion without pleural effusion is somewhat rare, and therefore this limits the practice; for the mere aspiration of the pleural effusion is almost invariably followed by such relief in cardiac cases that venesection is not required. It is therefore a necessary preliminary procedure to negative the presence of effusion in any quantity that would embarrass the heart's action and impede the pulmonary circulation. To do this thoroughly an exploring needle must be used. The condition of the lungs in a suitable case is such that, as regards the danger of subsequent pneumothorax, little or no air is being interchanged at the proposed seat of puncture, and the elasticity of the lung is quite sufficient to prevent any serious oozing taking place.

In practicing this method Dr. Simpson says the right side should be chosen if both sides are equally free of effusion, or are generally engorged. The site of puncture should be not higher than the ninth interspace posteriorly. The needle to be used is the largest usually supplied with an aspirator, the parts used being the canula and the corresponding trocar and fittings, but it will be found advantageous in some cases to use a probe of a size smaller than the canula.

The puncture should be made in one thrust, so that there be no danger of one or more small punctures of the lung. If this be not done the patient will cough and be troublesome, as the visceral layer of pleura is very sensitive, but with one thrust there is little or no discomfort. The depth of canula introduced need not be great at first, and it could only be by great carelessness that any vessel of any size could be injured. The *tactus eruditus* will at once advise the operator of the fact that the end of the canula is not in a free space containing fluid. The canula being steadied and the needle withdrawn, the operator should wait for a few seconds to see if any blood flows. If not, the canula should be moved, so as to produce slight laceration, then slightly withdrawn and usually there is a free flow. If clotting takes place, the smaller probe should be introduced and the canula cleared. The probe being smaller, allows of blood to flow, although it may be *in situ*, and keeps any lung tissue from the end of the canula.

The amount of blood to be abstracted varies according to the case and the results produced, it being as a rule less than would be required were venesection adopted. The extraction requires some care. The finger should be placed on the angular aperture

of the canula and either the needle or probe introduced along the canula and kept there for a few minutes, to allow of clotting to take place in the lung, and then slowly withdrawn.

The local after-treatment consists in applying a piece of plaster to the puncture, and a bandage if the dyspnœa will admit of it.

The Beef Tea Delusion.

Dr. E. B. Ward, says, in the *American Lancet*, Nov.; 1890:

There are certain fallacies in the practice of medicine which any one can see through, but which have been handed down from one generation of doctors to another, until they came to be accepted and even taught as truths. Perhaps there is not one of them more generally adopted, or more harmful, than the beef tea delusion, and this was just now brought to my mind by reading, in a late medical magazine, "Prof. Keen's Method of Making Beef Tea." His method is much the same as was taught me thirty-five years ago, and which, even then, my juvenile medical mind revolted against to such an extent that I have not given beef tea for over thirty years. I substituted milk, which even so recently as that was thought by good authority to be a dangerous pabulum in low stages of fever. My cases of death, however, were fully as rare, and it seemed to me more rare, than with patients otherwise managed. Here is Prof. Keen's method: Select round or rump, as it is useless to spend money for choicer beefs when this is just as good for the purpose. Take one pound, chop it into fine pieces about the size of the end of the little finger, and soak in one pint of cold water for two hours. Then boil the whole, strain, and add enough water to make a pint. Add sufficient quantity of salt, pepper, etc., to suit the taste. The object of soaking in cold water is to get the essence out of the beef. If warm water is used, a coating of albumin coagulates on the surface of the beef, thus preventing the essence from escaping.

Now let us try to make some of this beef tea.

We take a pound of finely-cut beef and pour a pint of cold water on it, and let it stand two hours—while we write about it. The water is not near sufficient to cover the beef, but with occasional agitation we get at the essence. At the end of two hours we find the meat surrounded by a reddish-colored liquid. Put a little of this fluid into a test-tube, and hold it in the flame of a spirit lamp. You see it coagulates to the extent of one-fourth, perhaps. What is that? Well, never mind now, we are going to make some beef tea. Now, we proceed to "boil the whole." He doesn't say how long, and it does not make much difference so long as the water holds out. Now "strain and add sufficient water to make a pint." You perceive that it is too strong and has to be diluted. Let us take a little of this concentrated essence in a test-tube and examine it. Here is a translucent fluid with a bland taste, a neutral reaction, and a slight odor of beef. By closer inspection you observe little fine particles of sediment slowly settling. This, Pavy says, should be stirred up and given with the tea, but as it is only particles of coagula which have skipped through the strainer let us have it out. If part of it ought to come out, it all should. So we will filter this liquid, and you observe we have a limpid almost colorless fluid left, and a slight deposit on the filter. What is it? Well, we shall see shortly. Now take a little of this liquid in a test-tube and drop a few drops of nitric acid into it. There is no precipitate formed, so we know there is no albumin or fibrin in it. What is in it? Well, there is a little saline matter, and—a world of disappointment to any one who tries to sustain life with it. That is about all. Why!—Well, the thing is too absurd to talk about. Common well-water containing the average quantity of bacteria is more nourishing.

Thousands of sick people have been starved to death on this diet, and I want to enter my solemn protest against it before it is everlastingly too late. What you want is the albumin and fibrin of the meat in a condition requiring little digestive power, and that will be readily assimilated. The moment you coagulate these ingredients by heat you render them practically indigestible. These, however, by this process are mostly strained out and the fluid is left inert, or nearly so.

Good milk is preferable always, but if you must give beef tea, *never boil it.* Liebig says 120° F. is the highest temperature to which it should be subjected. It is not very inviting in its general aspect, but it holds in solution the ingredients that you want, and which are rendered useless for a weak diges-

tion by boiling. Liebig's plan is to add a little hydrochloric acid.

Perhaps there is nothing in the whole round of dietetics, however, that holds so much real needed food, in a given space, as good rich milk punch—teetotalers to the contrary notwithstanding.

Koch's Cure for Consumption.

The *Medical Record*, Nov. 15, 1890, says, editorially: As we write, the daily papers are printing, with every issue, some fresh news of the wonderful, and as yet secret, "cure" for consumption discovered by Dr. Robert Koch. The interest in it is natural and intense. In this country there are some two hundred thousand sufferers from this fell disease, and in Europe and other parts of the world a still greater army of victims are hopefully looking for some cure, or patiently awaiting the end.

The expectations aroused by the numerous and mysterious reports that are issued from Berlin must be very great. It is well, therefore, to consider how much can be in fact realized by the announced "cure." Of it we know at least this, that it is a germicide, and that its action depends upon its destroying the vitality or power of growth of the tubercle bacilli. If this is the case, it is a remedy that must have various limitations to its usefulness. Phthisis is, in most cases, in its inception an infectious bacillary disease. But after lung tissue is once well invaded, and necrotic and inflammatory processes set in, the infection is a mixed one, and pyogenic organisms are largely in control. No agent which simply destroys tubercle bacilli can, therefore, seriously modify the phthisical process. Germicides cannot cure phthisis in its second and third stages.

We are confident that Dr. Koch will not claim this for his "cure." Already it is stated that cases of lupus, of tubercular joints, and of phthisis in the first stage have been cured. But all these forms of tuberculosis can already be relieved by surgical and hygenic measures at our disposal. It remains to be seen, therefore, whether Koch has really supplied us anything which will carry the treatment of tuberculosis any further than it already has been brought.

One thing further, perhaps, he has achieved, viz., a method of prevention for those susceptible or exposed to the disease. This may be a gain, although the prevention of phthisis in individual cases is almost always possible if proper care is taken.

Orton Prize.

Dr. J. G. Orton, ex-President of the New York State Medical Association, has offered a prize of $100 for the best short popular essay on some subject connected with practical sanitation, under the following conditions:

1. Competition to be open to all.

2. Essays to be forwarded to the Secretary of the Association, Dr. E. D. Ferguson, Troy, N. Y., not later than August 1, 1891, accompanied by the name of the author under separate seal.

3. Examination and award to be made by a Committee appointed by the Council of the Association.

4. The successful essay to be read at the next annual meeting of the Association, and, if approved by the Council, to be offered for publication in the secular press, and issued in tract form or otherwise for general circulation.

5. Authors of essays, unsuccessful as far as the prize is concerned, but found worthy of special commendation, to receive intimation as to a proper disposition to be made of them.

Leprosy in Louisiana.

The *New Orleans Medical and Surgical Journal*, November, 1890, says:

In olden times a leper was set down as a source of danger to a community, and he was placed in an institution where he could drag out his weary existence without endangering the health of other people. Sometimes this quarantine amounted to banishment and was attended with sad hardships; but it was effectual, and leprosy almost became extinct. In countries where the disease was not regarded as communicable, it was not blotted out. In Norway leprosy is not regarded with special horror or fear, and the disease is allowed to linger there. In Louisiana we seem to be as brave or as foolishly indifferent as the Norwegians. There are no statistics from former years which would enable us to say whether the vile disease is increasing or diminishing; but there can be no doubt that the presence of more than fifty lepers in a State containing 1,140,000 inhabitants is sufficient to justify

the expenditure of enough money to make them no longer a source of danger. Not many months ago a single leper was found in London. He was a butcher, and the discovery that a leper had been handling the mainstay of British life and the British constitution—namely, the beefsteak—almost threw the world's metropolis into a panic. The news was telegraphed to all parts of the English-speaking world. Meetings were held under the auspices of the Prince of Wales, whence the patient was dubbed "the Prince of Wales' leper." Some one advocated the founding of a leper hospital, but nothing was done, although, we believe, subscriptions were raised. In time the scare died out.

After commenting on the undue prominence given to the case, the Editor contrasts it with the indifference to leprosy in New Orleans. He says that while attending a play at the most popular theatre in New Orleans, on October 19, 1890, he saw a youth pass by him between the acts who presented the typical leonine expression of tubercular leprosy. The theatre was crowded; it was a Sunday-night performance, always the best patronized in our wicked city. The leper was well dressed; he passed in and out among the throng like any one else. About two years ago the writer went, one afternoon, into a well-known restaurant to get a lunch. Just as he was about to begin operations three men entered and sat at a table not more than five yards distant. The husky voice of one of the men attracted the writer's attention. A careful examination showed that the man was suffering from leprosy in an advanced stage; his face had the leonine expression, and the husky voice doubtless indicated that the disease had invaded the larynx. A waiter was called and asked if the man with the hoarse voice was a regular patron of the eating-saloon. The reply was in the negative. The writer then ate his lunch. About two months ago he, while walking along the river front, saw a group of women and girls standing in a doorway and talking. When he was abreast of the group he was struck by the husky voice and labored speech of an old woman. True to his medical instincts, he turned his gaze upon the sufferer and saw a well-marked case of leprosy. He was walking along not very slowly, but he noticed a small stand or show-case containing bread and cakes for sale. The old woman was bare-headed, and from appearances seemed to be an inmate of the house in which the cakes were sold.

After making these statements the Editor adds: "Now, is this right? These incidents are not much, but they indicate a horrible degree of neglect on somebody's part. One leper 3,000 miles away can furnish our papers with palatable news, but fifty lepers at home are allowed to pass unnoticed. Unfortunately, frequent contact with our own lepers has made us callous and indifferent to the risk we are constantly exposed."

He says that it is the opinion of a large majority of the men who are familiar with the disease that the best known means of preventing its spread is by segregation under State or government authority, and that a member of the staff of the *New Orleans Medical and Surgical Journal*, who has, perhaps, seen more cases of leprosy in America than any other American, has advocated this plan before the medical public as well as before individual members of the State Legislature.

Lycoming County Society Lectures.

The Lycoming County Medical Society is giving a course of lectures by prominent physicians this winter. Dr. John B. Roberts, of Philadelphia, opened the course October 6, with a paper "On Simplicity in Fracture Dressings;" and Dr. J. C. Wilson, of Philadelphia, lectured November 4, on "The Treatment of Enteric Fever." Both lectures were attended by a large number of physicians of the West Branch Valley, the representation extending from Sunbury to Renovo. Other lectures will follow monthly.

Mütter Lectures of the College of Physicians of Philadelphia.

The course of lectures on Surgical Pathology, provided in accordance with the will of the late Prof. Thomas D. Mütter, will be delivered during 1890–91 by Prof. Roswell Park, of Buffalo, New York. The first series of five lectures will be given in the hall of the College of Physicians, corner of Thirteenth and Locust streets, on December 4, 5, 6, 8 and 9 at 8.15 P. M.

The subjects are as follows:

1. Introductory. Study of the blood and of some phases of the inflammatory process. Thrombosis. Embolism. Hemoglobin and

Oligochromemia. Ptomaines. Conditions predisposing to infection.

2. A study of pus and of pyogenic organisms, obligative and facultative.

3. Surgical sepsis and the organisms which produce it. Resumé of experimental work. Surgical fever, Intestinal Toxemia, Sapremia, Septicema and Pyemia.

4. Peritonitis: forms and causes. Testing the relative values of antiseptics.

5. Tetany and Tetanus.

The members of the medical profession are cordially invited to be present.

Pasteur Institute Statistics.

During the month of September, one hundred and forty-one persons were treated in the Pasteur Institute at Paris. Of this number, twenty-four were bitten by animals supposed to be rabid, from the success of "experimental inoculations;" ninety were bitten by animals considered rabid by veterinarians; twenty-seven were bitten by animals "suspected" to be rabid. The animals that did the biting were: dogs, one hundred and twenty-three times; cats, sixteen times; asses, twice.

NEWS.

—Dr. B. J. Weyll, a well-known citizen of Camden, died on Saturday, in his eighty-sixth year.

—Dr. R. Curtis Gray has removed to 345 Lafayette Avenue, Brooklyn, N. Y. Telephone call, "Bedford, 593."

—Miss Annie A. Hintze, head nurse at the Pennsylvania Hospital, has resigned, to accept a position in the American Hospital, at Rome.

—An epidemic of diphtheria was recently prevailing at Garner, Iowa, and all the schools there were closed. Deaths from the disease occurred daily.

—A wealthy citizen of Wilkesbarre, Pa., had not, it was said on November 24, eaten a morsel of food for two weeks. He persistently refuses to eat, insisting that he is dead and does not require food.

—Dr. Robert H. Bolling will take Dr. Cleveland's place as Senior Resident Physician at the Germantown Hospital, commencing December 1, and Dr. W. G. B. Harland will act as his assistant.

—The newspapers of November 21 reported that a physician in a suit for damages in a large city in the United States used the word "clonic," and four doctors called by the defence testified that there was no such word, either in the English language or as a medical term.

—Dr. J. H. McKellup, who was authorized by Governor Ross to thoroughly investigate the reported existence of glanders in Texas, has forwarded his report to the Governor. It states that the only section where glanders was found to have existed was in Dewitt county, where thirteen cases occurred among horses. All the affected animals have been killed.

—The Trustees and Medical Board of the German Hospital decided on November 20, that Dr. Carl Frese, Chief Resident Physician of the institution, should sail for Berlin to investigate Dr. Koch's recent discovery in the treatment of tuberculosis. Professor Ernest Laplace, of the Medico-Chirurgical Hospital, sailed November 20, on a similar errand.

—Dr. George T. Dare, for forty-eight years a practicing physician in Lancaster and Chester counties, Pa., met with a tragic fate at San Diego, Cal., a few days ago. He fell from a porch at the home of his son, David D. Dare, and one of his thigh bones was fractured. Being eighty-four years old the doctor's debilitated system was unable to withstand the shock, and death followed.

—A bazaar in aid of the Polyclinic Hospital, Lombard Street, above Eighteenth, will be given on December 3 and 4, under the auspices of the Ladies' Aid Society. The management has decided to make no charge for admission, trusting that those who attend will voluntarily contribute or make purchases. The bazaar will be made the occasion of affording opportunity to inspect the new hospital building, in which it is to be held.

—John Feeney created an uproar in a Chicago Court November 20, by smashing a rotten egg on the head of Dr. Kiernan, former physician in charge of the Cook county insane asylum. Feeney's sanity was being tried, and Dr. Kiernan was on the witness stand when the egg was thrown. Feeney then quietly turned over to an officer of the Court another egg, which he had in reserve in case the first one had missed its mark. The jury found Feeney insane.